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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/476,219	12/30/1999	Robert J. Fite	884.182US1	7477
21186 7590 01/03/2007 SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH, P.A. P.O. BOX 2938 MINNEAPOLIS, MN 55402			EXAMINER HAN, YOUNGHUIE JESSICA	
			ART UNIT	PAPER NUMBER
			2838	
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
3 MONTHS		01/03/2007	PAPER	

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

<b>Office Action Summary</b>	<b>Application No.</b> 09/476,219	<b>Applicant(s)</b> FITE, ROBERT J.	
	<b>Examiner</b> Y. J. Han	<b>Art Unit</b> 2838	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 16 October 2006.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-7 and 9-16 is/are allowed.
- 6) ☒ Claim(s) 8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 8 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 8 recites “adjusting the voltage signal indicating the sensed output current such that the voltage is at a maximum voltage level when the current drawn is at a maximum operating load current level and the voltage is at a minimum voltage level when the current drawn is at a minimum operating load current level, wherein the minimum operating load current level is greater than zero current and the provided voltage remains at the minimum operating voltage level if the current drawn is equal to or less than the minimum operating load current.”

The support for the underlined limitations is not found in the specification. Moreover, claim 8 as recited contradicts applicant’s argument that “the pending claims as amended each clearly recite that the output voltage remains at the maximum operating voltage level if the current drawn is equal to or less than the minimum operating current load current, where the minimum operating load current is greater than zero current, the pending claims have been shown to be distinct from the cited art.”

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

Art Unit: 2838

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

4. As best understood, claim 8 is rejected under 35 U.S.C. 102(a) as being anticipated by Redl et al (6,064,187).

Redl et al discloses sensing an output current (64) drawn from the DC-DC converter; converting the sensed output current to a voltage signal indicating the sensed output current (78/76); adjusting the voltage signal indicating the sensed output current such that the voltage is at a minimum voltage level when the current drawn is at a maximum load current level and the voltage is at a maximum operating voltage level when the current drawn is at a minimum but nonzero operating load current level (see Figures 10a-b); and adding/subtracting the adjusted voltage signal from the voltage provided by the DC-DC converter (see Figure 9, abs., and col. 10, line 65 thru col. 11 line 15).

5. As best understood, claim 8 is rejected under 35 U.S.C. 102(a) as being anticipated by Rincon-Mora et al (6,188,211).

Rincon-Mora et al discloses sensing an output current (40) drawn from the DC-DC converter; converting the sensed output current to a voltage signal indicating the sensed output current (40,42); adjusting the voltage signal indicating the sensed output current such that the voltage is at a minimum operating voltage level when the current drawn is at a maximum load current level and the voltage is at a maximum operating voltage level when the current drawn is at a minimum but nonzero operating load current level (see Figures 2a-b); and subtracting the adjusted voltage signal from the voltage provided by the DC-DC converter (see Figure 1, and col. 6, line 35 thru col. 7 line 52).

6. As best understood, claim 8 is rejected under 35 U.S.C. 102(a) as being anticipated by the acknowledged prior art (Figures 1 and 2).

Applicant's invention is no different than the acknowledged prior art. Prior art Figures 1 and 2 are no different than the applicant's invention of Figures 4 and 5. Applicant is requested to point out how the admitted prior art Figures 1 and 2 are different from the applicant's Figures 4 and 5.

***Response to Argument***

7. The applicant's argument directed to the differences between the instant invention and the applied reference has been fully considered but is not deemed to be persuasive as applied to the claim 8. As pointed out above, claim 8 is inconsistent with the applicant's argument.

***Allowable Subject Matter***

8. Claims 1-7 and 9-16 are allowed.

***Conclusion***

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

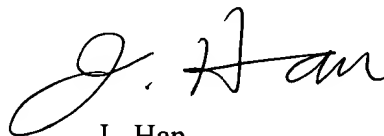
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Y. J. Han whose telephone number is 571-272-2078. The examiner can normally be reached on Mon-Fri 6:30am-3:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Karl Easthom can be reached on 571-272-1989. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



J. Han  
Primary Examiner  
Art Unit 2838